** CALVIN Groundwater Update

Heidi Chou, Prudentia Zinkalala, Christina Buck, Jay R. Lund, Josué Medellín-Azuara (UC Davis)

Abstract: Updates are being made to the CALVIN hydro-economic optimization model of California's intertied water supply and delivery system. These updates better reflect water demands, groundwater availability, and local water management opportunities. This poster will focus on updates to groundwater in CALVIN, which includes changing CALVIN groundwater parameters based on California Department of Water Resources' (DWR) California Central Valley Groundwater-Surface Water Simulation Model (C2VSIM) and the United States Geological Survey (USGS) Central Valley Hydrologic Model (CVHM) model inputs and results. Two projects, using the respective groundwater models by DWR or USGS model as a base, are underway to update CALVIN's groundwater representation, specifically basin inflows, reuse, return flows, capacities, and costs. When these sub-projects are completed and analyzed, a CALVIN model with updated groundwater representation based on C2VSIM and CVHM will emerge. For this poster, a preliminary comparison of these sub-projects and a summary comparison between the DWR and USGS models will be presented and discussed.